5

10

15

ABSTRACT OF THE DISCLOSURE

A two level image writer (10) for forming an image from digital data onto a photosensitive medium comprising an illumination system on a first level for providing incident light beams. The illumination system comprising a first source (20) for emitting a first polarized light beam having a first color; a second source (22) for emitting a second polarized light beam having a second color; and a third source (26) for emitting a third polarized light beam having a third color. A fold mirrors directs each beam to a second level and three polarizing beamsplitters (73, 75, 77) on the second level receive the polarized beams from the fold mirrors. Each polarizing beamsplitter isolates polarization states of each of the first, second, and third polarized light beam. Three spatial light modulators (90, 95, 97) on the second level, each comprising an array of pixel sites, wherein each pixel site modulates the first, second, and third polarized light beam from the polarizing beamsplitter prisms to form an array of image pixels according to said digital data. A dichroic combiner (86) combines the three

modulated light beams into a single writing beam.